Abstract

Collaborative Filtering technique has been proved to be one of the most successful techniques in Recommender System, where this technique utilizes the information and the preference of other users or items to provide item recommendations. There are two types of algorithm for CF : memory-based CF and model-based CF. On this research we use memory-based CF with smoothing technique which can handle sparsity.

Based on research, the Collaborative Filtering recommendation method memory-based CF with smoothing technique can reduce system error measured by Mean Absolute Error (MAE) from 0,8581 to 0,8483 or decline by 1,14% compared to memory-based algorithm only.

Keywords : Collaborative Filtering, Recommender System, Memory-based CF, sparsity, MAE